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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/506,847	Applicant(s) IKEDA ET AL.	
	Examiner Dzung D. Tran	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-28,50 and 51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-28,50 and 51 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 7, 26-28 and 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable Alwan et al. US 7,224,908.

Regarding claim 1, Alwan discloses in Figures 3-4, an optical output unit comprising:

an external information receiver 306(b) (i.e., receiver of transmitter/receiver 16) for receiving a plurality of external information from an information processing terminal (i.e., from terminal 108(a));

an optical output device 304(b) including a plurality of optical output elements for outputting light;

wherein the optical output unit further comprises an optical output controller 310(b) for performing multistage control of the output light of the plurality of optical output elements based on the plurality of external information receiver (Figure 4, col. 7, lines 22-35, col. 8, lines 35-56; Col. 9, line 45 to Col. 10, line 6).

Alwan differs from claim 1 of the present invention in that he does not specifically disclose the plurality of external information includes at least two kinds of information

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representing a condition of a user of the information processing terminal. However, it is well known in the art that the external control signal or external information can be any kind of information and it is merely an engineering design choice. Therefore, at the time of the invention was made, it would have been obvious for an artisan to choose the external control signal or external information as a information representing a condition of a user of the information processing terminal.

Regarding claim 3, Alwan discloses wherein the optical output device includes optical output elements for outputting light, the external information includes a mode data representing a kind of information and a data value indicating a magnitude of the information represented by the mode data, and the optical output controller controls optical outputs of the optical output elements according to the mode data and the data value included in the external information received by the external information receiver (Figure 4, Col. 9, line 45 to Col. 10, line 6).

Regarding claim 7, Alwan discloses wherein the optical output controller gives a command for producing optical output in one level of intensity among at least three different levels in the multistage control (Figure 4, Col. 9, line 45 to Col. 10, line 6).

Regarding claim 50, Alwan discloses in Figures 3-4, an optical output unit comprising:

an external information receiver 306(b) (i.e., receiver of transmitter/receiver 16) for receiving a plurality of external information from an information processing terminal (i.e., from terminal 108(a));

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an optical output device 304(b) including a plurality of optical output elements for outputting light;

wherein the optical output unit further comprises an optical output controller 310(b) for performing multistage control of the output light of the plurality of optical output elements based on the plurality of external information receiver (Figure 4, Col. 9, line 45 to Col. 10, line 6).

Alwan differs from claim 1 of the present invention in that he does not specifically disclose the plurality of external information includes at least two kinds of information representing a condition of the information processing terminal. However, it is well known in the art that the external control signal or external information can be any kind of information and it is merely an engineering design choice. Therefore, at the time of the invention was made, it would have been obvious for an artisan to choose the external control signal or external information as a information representing a condition of the information processing terminal.

Regarding claim 51, Alwan discloses in Figures 3-4, an optical output unit comprising:

an external information receiver 306(b) (i.e., receiver of transmitter/receiver 16) for receiving a plurality of external information from an information processing terminal (i.e., from terminal 108(a));

an optical output device 304(b) including a plurality of optical output elements for outputting light;

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wherein the optical output unit further comprises an optical output controller 310(b) for performing multistage control of the output light of the plurality of optical output elements based on the plurality of external information receiver (Figure 4, Col. 9, line 45 to Col. 10, line 6).

Alwan differs from claim 1 of the present invention in that he does not specifically disclose the plurality of external information includes at least a first information representing a condition of the information processing terminal and a second information representing a condition of a user of the information processing terminal. However, it is well known in the art that the external control signal or external information can be any kind of information and it is merely an engineering design choice. Therefore, at the time of the invention was made, it would have been obvious for an artisan to choose the external control signal or external information as a information includes at least a first information representing a condition of the information processing terminal and a second information representing a condition of a user of the information processing terminal.

Regarding claims 26-28, a repeater unit is a duplicate of the optical unit of claim 1. It would have been obvious to one having ordinary skill in the art at the time the invention was made to duplicate another unit cal repeater unit, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

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3. Claims 1, 3-4, 7 and 26-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Anemogiannis et al. US 5,965,876.

Regarding claim 1, Anemogiannis discloses in Figure 2, an optical output unit comprising:

an external information receiver RX for receiving external information representing a data transmitted from outside;

an optical output device laser 40 including a plurality of optical output elements for outputting light; and

an optical output controller 30 for performing multistage control, wherein the controller makes the optical output device produce at least one mode of optical output among at least three different modes of the optical output according to the external information (Col. 3, lines 43-55).

Anemogiannis differs from claim 1 of the present invention in that he does not specifically disclose the plurality of external information includes at least two kinds of information representing a condition of the information processing terminal. However, it is well known in the art that the external control signal or external information can be any kind of information and it is merely an engineering design choice. Therefore, at the time of the invention was made, it would have been obvious for an artisan to choose the external control signal or external information as a information representing a condition of the information processing terminal.

Regarding claim 3, Anemogiannis discloses wherein the optical output device includes optical output elements for outputting light, the external information includes a

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mode data representing a kind of information and a data value indicating a magnitude of the information represented by the mode data, and the optical output controller controls optical outputs of the optical output elements according to the mode data and the data value included in the external information received by the external information receiver (Col. 3, lines 43-55).

Regarding claims 4 and 6, Anemogiannis discloses in Figure 4, a learn mode for storing each normal fiber its length and pulse intensity information (col. 3, lines 42-67).

Regarding claim 7, Anemogiannis discloses wherein the optical output controller gives a command for producing optical output in one level of intensity among at least three different levels in the multistage control (Col. 3, lines 43-55).

Regarding claims 26-28, a repeater unit is a duplicate of the optical unit of claim 1. It would have been obvious to one having ordinary skill in the art at the time the invention was made to duplicate another unit cal repeater unit, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

4. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anemogiannis et al. US 5,965,876 in view of Ackerman US 6,064,681.

Regarding claim 8, Anemogiannis does not specifically disclose wherein the optical output controller gives a command for producing optical output in one color of

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light among at least three different colors in the multistage control. Ackerman discloses in Figure 1, a controller 18 for controlling wavelength of the tunable laser 12 (i.e., producing optical output in one color of light among at least three different colors in the multistage control). At the time of the invention was made, it would have been obvious to an artisan to include the wavelength controller taught by Ackerman in the apparatus of Anemogiannis. One of ordinary skill in the art would have been motivated to do that in order to produce a predetermined wavelength. Thus, it improves system distribution.

Regarding claim 9, controlling the blinking of the LED is well known in the art (i.e., see Tyrell et al. US Patent no. 5,185,736, paragraph 2677).

Regarding claims 10 and 11, whether the controller gives a command for producing optical output in one way of turning a light source among at least three different ways of turning in the multistage control or gives a command for producing optical output in one area size of light source among at least three different area sizes in the multistage control is merely an engineering design choices.

5. Claims 12-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anemogiannis et al. US 5,965,876 in view of Lichter et al. US 6,712,762.

Regarding claims 16-21, Anemogiannis does not specifically disclose the external information includes a pressure data representing information on a pressure, a heart rate data representing information on a heart rate, a heart rate data representing information on a heart rate, a blood-sugar data representing information on a blood-

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sugar, a health condition data representing information on a health condition, a pH value data representing information on a pH value. Lichter discloses the external information includes a pressure data representing information on a pressure, a heart rate data representing information on a heart rate, a heart rate data representing information on a heart rate, a blood-sugar data representing information on a blood-sugar, a health condition data representing information on a health condition, a pH value data representing information on a pH value (Col. 8, lines 1-30). At the time of the invention was made, it would have been obvious to an artisan to include the teaching of Lichter in the apparatus of Anemogiannis. One of ordinary skill in the art would have been motivated to do that in order to provide the biological data to the control system.

Regarding claims 12-15 and 22-25, whether the external information includes information representing a speed of incoming data input or representing an operating rate of a CPU or representing information on a location or representing information on a place or representing information on an angle or representing information on rotation or representing information on electroencephalograph or the optical output unit having any of a cubic shape, a rectangular hexahedral shape and a spherical shape is merely an engineering design choices.

6. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims 1, 3-28 and 50-51 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung D Tran whose telephone number is (571) 272-3025. The examiner can normally be reached on 9:00 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Primary Examiner, Art Unit 2613